

Tracing the Impact of Taxation Policies on Sustainable Economic Development

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Taxes play a pivotal role as the primary source of government revenue. Every new tax policy has the potential to increase government revenues and create opportunities for economic advancement. The effectiveness of taxes is contingent upon the system and policies put in place. Various tax types are imposed across different sectors of the economy. In this paper, we delve into an examination of the taxation policies implemented in Pakistan. This research paper employs both qualitative and quantitative methods to investigate the topic. Secondary data spanning the 2021-22 period has been gathered for the purpose of this study. The findings will lead to recommendations for improved policies that can contribute to sustainable development. As a result, this study not only adds to the existing body of literature but also fosters a research culture in the country, offering valuable insights into the impact of taxation policies on sustainable development.

Keywords: Taxes, Government, revenue, development, sustainable, taxation policies, Pakistan, qualitative methods, quantitative methods, secondary data, sustainable development.

INTRODUCTION

Taxation plays a pivotal role in maintaining economic equilibrium, with the government serving as the cornerstone of economic welfare. Among its myriad functions, revenue collection and expenditure allocation are paramount for national prosperity (Aijaz *et al.* (2023). This research aims to dissect the distinctive characteristics of various tax types, unraveling the intricacies of tax policies (Bukhari & Haq (2020). Additionally, it will scrutinize the sources and limitations of each tax and offer strategic recommendations for enhancement.

Tax Classification: In Pakistan, the tax landscape comprises 73 distinct taxes administered by 37 different agencies, primarily categorized into direct and indirect taxes.

Direct Taxes: Direct taxes encompass Income Tax, Wealth Tax, and Property Tax.

1. **Income Tax:** Income tax, a direct levy, is sourced from various channels such as salaries, property, business income, capital gains, and other earnings like dividends and royalties (Malau & Sudjiman, (2023). Pakistan's income tax system follows a progressive structure, where the tax percentage escalates with income levels. For instance, in the fiscal year 2021-22, tax rates range from 0% for income up to

PKR 400,000 annually to 15% for income exceeding PKR 4,800,000. The number of tax brackets for salaried individuals has been reduced from 12 to 4.

Annual Income	Tax Rate
Up to PKR 1,200,000	0%
PKR 1,200,001 - 2,400,000	5% of the amount exceeding PKR 1,200,000
PKR 2,400,001 - 4,800,000	PKR 60,000 + 10% of the amount exceeding PKR 2,400,000
Above PKR 4,800,000	PKR 180,000 + 15% of the amount exceeding PKR 4,800,000

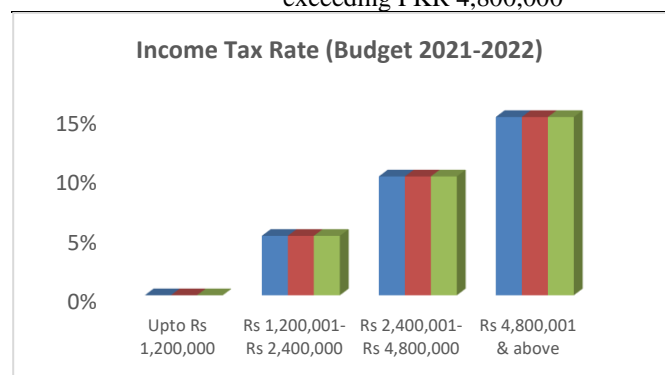


Figure 0.1. Tax Bracket

Notably, the highest tax rate has been capped at 15%, down from the previous 35%.

Conclusion: This research endeavors to provide a comprehensive analysis of taxation policies in Pakistan, focusing on direct taxes such as income tax. By shedding light on the intricacies of tax structures and their implications, it aims to contribute to informed decision-making and policy formulation for economic growth and stability.

Research Gap: Many economist and researchers worked on Taxes and their impact on growth. The study will be conducted to analyze the social and economic impact of taxation on Sustainable Economic Development in Pakistan. The research will clarify better policy implementation in Pakistan. The data for the study will be collected from secondary source.

Research questions: The research is based on following questions.

How taxation policies are working in Pakistan? What is the impact of taxation policies working in Pakistan? Which of the taxation policy is best suited in Pakistan? Are taxation policies adequately implemented? How taxation policies work on Sustainable Economic Development for betterment of Pakistan?

Research objectives: The Study Is Based On The Following Research Objectives.

1. To deeply analyze the impact of taxation policies on sustainable economic growth in Pakistan.
2. To examine which policy is best suited in Pakistan's economy.
3. To find out whether these policies are properly implemented.
4. To evaluate different taxation policies on Sustainable Development for the betterment of economy.
5. Review of literature
6. **literature review: exploring the impact of taxation policies on economic development:** Taxation policies play a crucial role in shaping the economic landscape of nations, influencing resource allocation and development trajectories. Several studies have delved into the intricate relationship between taxation policies and economic welfare across different regions and sectors.
7. **Brad (2012):** Brad's analysis of tax policies in Western EU countries reveals the growing prevalence of flat tax systems, attributed to their ability to broaden the taxpayer base and stimulate productive investments. However, the effectiveness of flat tax models in emerging economies is constrained by tax gaps and varying tax burdens. Contextual factors, such as alignment with EU tax standards, influence the viability of flat tax reforms.
8. **Ahmad & Xiao (2013):** In their study on the Nigerian economy, Ahmad & Xiao underscore the significance of taxation policies in fostering cooperation between the public and private sectors. They highlight taxation as a pivotal tool for resource allocation, with government

revenues often directed towards education, healthcare, and social welfare programs. Despite the complexity of Nigeria's fiscal regime, taxation policies remain instrumental in driving development initiatives.

9. **Adkisson & Mohammed (2014):** Adkisson & Mohammed (2014) examine the fiscal and taxation mechanisms driving the geothermal industry in China. They highlight government subsidies as a critical factor in incentivizing investment and development in renewable energy sectors. By leveraging taxation policies, China aims to optimize energy utilization and mitigate environmental impacts, aligning with national energy conservation goals.
10. **Andrei et al. (2016):** The impact of environmental taxation on economic growth in Romania is explored by Andrei et al. They emphasize the pivotal role of energy taxation in promoting sustainable development and meeting international environmental commitments. Granger Causality tests reveal a positive correlation between environmental tax revenues and GDP, underscoring the importance of aligning tax policies with environmental objectives.
11. **Randelovic (2017):** Randelovic delve into the local tax policies of Serbia, advocating for measures that stimulate employment, enhance international competitiveness, and foster domestic market growth. They stress the importance of balanced tax ratios and investment-friendly policies in driving municipal development initiatives.
12. **Xu & Lee (2017):** Xu & Lee explore environmental tax policies in mixed markets, focusing on the excess burden of taxation and its implications for public and private firms. Their analysis highlights the trade-offs between ex-ante and ex-post taxation models, underscoring the need for flexible taxation frameworks to mitigate economic distortions.
13. **Cao & Xia (2021):** Xia & Li analyze the impact of taxation policies on the burgeoning new energy industry in China. They highlight the role of tax incentives in fostering innovation and competitiveness within the renewable energy sector, emphasizing the alignment of tax policies with national development goals.
14. This refined version maintains the essence of each study while enhancing clarity and coherence. Let me know if there are any additional modifications you'd like to incorporate!

Research Methodology

Methodology: Assessing the Impact of Taxation Policies on Sustainable Development: To ensure the appropriateness and global acceptance of our research, we adopted a well-

recognized methodology that incorporates both quantitative and qualitative data analysis techniques. Our methodology is structured into three distinct parts, focusing on establishing a



robust theoretical framework and employing rigorous empirical analysis.

1. Unit Root Test: The first step in our methodology involves conducting a unit root test to ascertain the stationarity of the study variables over time. This test is essential for determining whether the mean and variance of the variables remain constant over the study period. We utilize the Dickey and Fuller (1979) test, a widely accepted method in econometrics, to assess the stationarity of the data.

2. Data Description: We utilize time series data spanning from 1981 to 2017 to examine the impact of taxation policies on sustainable development in Pakistan. GDP growth rate data is sourced from the World Development Indicators, while information on direct and indirect taxes, including sales tax, excise duties, and customs duties, is extracted from the Economic Survey of Pakistan published annually by the Ministry of Finance.

3. Empirical/Theoretical Framework: Drawing on existing literature and theoretical insights, we develop a comprehensive conceptual framework for our study. Building on previous research, we categorize indirect taxes into distinct components, such as sales tax, customs duties, and excise duties. Given the time series nature of the data, we employ established econometric techniques to examine both long-run and short-run relationships among variables.

4. Detail Description of Variables: We identify several key variables that influence economic growth, including GDP growth rate, direct taxes, and various categories of indirect taxes. Each variable is carefully selected based on a thorough review of the literature and its relevance to our research objectives.

5. Econometric Methods: In this section, we discuss the econometric tools employed to assess the extent of indirect taxes' impact on sustainable development in Pakistan. We begin by applying unit root tests to determine data stationarity. Subsequently, we utilize econometric models and diagnostic tests to analyze the relationships between taxation policies and sustainable development outcomes.

Application of Unit Root Test (Dickey and Fuller Test): The Dickey & Fuller (1979) test is utilized to evaluate the stationarity of the time series data. A series is considered stationary if its mean and variance exhibit no significant relationship with time. Conversely, non-stationary indicates a violation of this criterion. We estimate the Dickey and Fuller regression equation to determine the stationarity status of our variables.

$$X_t = \Pi_1 X_{t-1} + \varepsilon_t$$

In a given equation residual term is considered to be purely white noise which mean over the period of time mean is zero and variance of the residual term is constant. While on the contrary, discussed series is required to make stationary if $\Pi_1=1$ while it is said to be stationary and does not require to make stationary of $\Pi_1<1$. By summing up all above discussion

to check stationary condition of the series following null and alternative hypothesis are discussed.

$H_0: \Pi_1=1$ the series under study is necessarily need application of unit root test to make them stationary. Mean and Variance of discussed series is not constant over the period of time

$H_1: \Pi_1<1$ the series under study does not require any unit root application to make them non-stationary. Mean and Variance of discussed series is constant over the period of time.

The acceptance of alternative hypothesis is the sufficient condition for the series to be stationary over the period of time and vice versa. In a broader way above discussed equation is expressed as

$$y_t - y_{t-1} = (\Pi - 1)y_{t-1} + \varepsilon_t$$

$$\Delta y_t = (\Pi - 1)y_{t-1} + \varepsilon_t$$

$$\Delta y_t = \pi y_{t-1} + \varepsilon_t$$

Above discussed steps are involved for the presentation of Dickey and Fuller Series of unit root test. In these equations, $\phi=(\Pi-1)$ explains that if $\phi=0$ than y_t has constant mean and variance over the period of time which means given variable is stationary at level and it does not required any application of unit root test. If value of $\phi=1$ discussed variable has not constant mean and variance over the time and it necessitates application of unit root test and if value of $\phi>1$ it means variable has exploded mean and variance over a period of time and it necessarily requires application of unit root to make them stationary first for further analysis. Except first situation variable is necessarily needs application of unit root because without making series stationary estimated outcomes of econometrics model is spurious which misguide the researchers in policy development. After a basic equation, 2nd equation also include constant term which is written as

$$\Delta y_t = \Gamma_0 + \Pi y_{t-1} + \varepsilon_t$$

RESULTS AND DISCUSSION

A wide series of calculated results are presented in this section by following the material and method of preceding section. A well-organized econometrics method is adapted to access worldwide accepted outcomes that have strong theoretical support. Similarly, the statistical steps are used for the estimation of these results also has strong theoretical and statistical background. In a current study, a well establish econometrics method, an Auto regressive distributed lag model (ARDL) is used for the calculation of effect of taxation policy on sustainable development of an economy. The purpose of using the Autoregressive Distributed Lag (ARDL) model is to examine the long-run and short-run dynamics between variables in a time series context. This model is particularly useful when dealing with non-stationary time series data, where traditional regression models may lead to spurious regression results due to the presence of unit roots. Here are the key purposes of using the ARDL model:

1. **Analysis of Co-integration:** The ARDL model allows researchers to investigate whether there exists a long-run



relationship (co-integration) between the variables of interest. Co-integration implies a stable, long-term equilibrium relationship between variables despite short-term fluctuations.

2. **Short- and Long-Run Dynamics:** By incorporating lagged values of the dependent and independent variables, the ARDL model captures both short-term and long-term dynamics. This is particularly important in understanding how changes in the independent variables affect the dependent variable over different time horizons.
3. **Flexible Model Specification:** The ARDL model is flexible in accommodating both stationary and non-stationary variables. It allows for the inclusion of variables with different orders of integration, making it suitable for analyzing mixed-order integrated time series data.
4. **Error Correction Mechanism (ECM):** If co-integration is found to exist, the ARDL model can be augmented with an Error Correction Model (ECM). The ECM captures the adjustment process towards the long-run equilibrium following short-term deviations, providing insights into the speed of adjustment.
5. **Diagnostic Testing:** The ARDL model enables researchers to perform diagnostic tests, such as testing for serial correlation, heteroscedasticity, and stability of coefficients. These tests help ensure the reliability and validity of the estimated model.

Overall, the ARDL model is a powerful econometric tool for analyzing the dynamic relationships between variables in time series data, particularly when dealing with non-stationary and mixed-order integration. It is widely used in empirical research across various fields, including economics, finance, and social sciences.

In detail description, a series of steps are used for the calculation of results due to time series nature of data. Initially, ADF (Augmented Dickey Fuller) method is used to check the stationary condition of the data such measure is applied when number of observation are more than 20. In a given study data is taken from 1990 to 2022 that have number

of observations clearly more than 20 therefore ADF method is appropriate for the judgment of stationary condition of the data (Worden et al., (2021)). Secondly, Granger (1969) developed test is applied for the measurement of uni-directional and bi-direction causality among various variables. In a third step lag length of the model is measured by using VAR lag length criteria that further followed various well-known criteria's like AIC, SBC and HIQ. In a fourth step (Natsiopoulous & Tzeremes (2022) developed model is applied to check the impact of taxation policy on sustainable development of Pakistan economy. Final step used diagnostic test to check whether calculated coefficient are appropriate or not. If diagnostic test are accurate than it is necessary that estimated coefficient are appropriate and theory supported but if the diagnostic measure are nor accurate than results are declared spurious and non-presentable.

Descriptive Analysis of the selected Variables for current study: Table 1 presents the descriptive statistics of the model under study, first variable shows that average GDP growth rate for last 38 years is 4.89 percent with median, maximum and minimum value 4.85, 10.22 and 1.014 percent respectively. Similarly, standard deviation is 2.098 with Skewness and kurtosis value 0.200 and 2.70 that represents normally distribution of the variable that is also proved with the J-B test statistics i.e. 0.403 along with probability 0.817 which clearly greater than 0.05 and favors that data is normally distributed.

2nd variable of log of custom duties expresses that average custom duties in last 38 years is 11.207 percent with median, maximum and minimum value 11.12,13.12 and 9.44 percent respectively. In the similar way standard deviation for current variable is 0.93 with Skewness and kurtosis measure 0.000 and 2.44. Final value of J-B test is 0.492 with probability 0.781 that also favors that custom duty variable is normally distributed because the probability value greater than 0.05 or 5% threshold and also Skewness and Kurtosis measures are 0 and almost 3.

3rd variable of the study log of sale tax reveals that average sale tax in last 38 years is 11.32 percent with median estimates 11.58 percent along with maximum and minimum value

Table 1. Descriptive Estimates of the Study under Estimation

Statistics	GDP _{gr}	CD	ST	DT	ED
Mean	4.899	11.207	11.323	10.699	11.115
Median	4.846	11.118	11.577	10.781	11.056
Max.	10.215	13.115	14.111	12.195	14.099
Min.	1.014	9.439	8.581	9.179	7.787
Std. Dev.	2.098	0.928	1.728	0.878	2.022
Skewness	0.200	-0.000	-0.010	-0.004	-0.133
Kurtosis	2.693	2.442	1.697	1.952	1.704
J-B-Test	0.403	0.492	2.684	1.748	2.768
Probability	0.817	0.781	0.261	0.417	0.250

GDP_{gr}=GDP Growth Rate; CD=Custom Duty; ST=Sales Tax; DT=Direct Taxes;ED=Excise Duty

Source=Author's Citation



14.11 and 8.58. Similarly, standard deviation measure is 1.73 with Skewness and Kurtosis -0.010 and 1.70 that measures show normally distribution of the sales tax that is also proved with J-Bstats 2.68 and its probability 0.261 which is clearly more than 0.05 or 5% threshold.

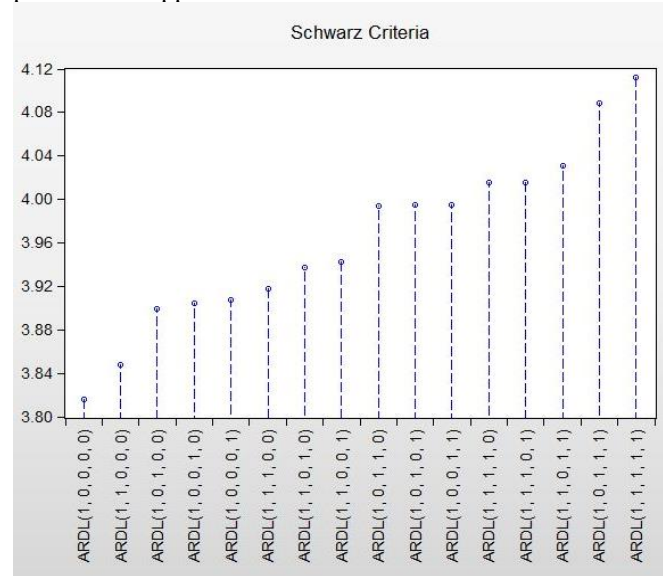
4th variable log of direct tax illustrates that average direct tax in last 38 years is 10.70 percent with median estimates 10.78 percent along with maximum and minimum value 12.20 and 9.18. Similarly, standard deviation measure is 0.878 with Skewness and Kurtosis -0.004 and 1.95 that measures show normally distribution of the sales tax that is also proved with J-B stats 1.75 and its probability 0.417 which is clearly more than 0.05 or 5% threshold.

Estimates of final variable log of excise duties explains that average excise duty in last 38 year is 11.12 percent with median estimates 11.06 percent along with maximum and minimum value 14.099 and 7.88. Similarly Standard deviation of the variable is 2.022 with Skewness and Kurtosis measure -0.133 and 1.704 that shows normally distribution of the data which is also proved with J-B stats 2.76 and its probability 0.250 that is clearly more than 0.05 or 5% threshold.

Granger Causality Estimates of the Model under Study: For the calculation of ARDL or any univariate model it is necessarily required that variables of study show uni-directional causality among each other. Estimated outcomes of pair wise Granger Causality test for current study signifies that maximum number of variables show uni-directional causality among each other and also no reverse causality found among any pair of variables that are given below. Hence estimated measure concludes that univariate or ARDL model is well acceptable for problem under assessment. Custom duty, Direct Taxes and Excise duty shows uni-directional causality with GDP growth rate at 1,5 and 10 percent level of significance while sale tax show does not shows any causality with GDP growth rate. Overall discussion sum up that for applying ARDL model it is necessarily required that at least an explanatory variable shows uni-direction causality with dependent variable while in a current study three variables have uni-directional association with dependent variable that fulfill basic criteria for the application of above discussed model.

Selection of appropriate model by following sbc criteria:

Figure 4.1 shows different possible models by following sic (schwarz information criteria) criteria under lag length 1 that are detailed discussed previously. 16 possible models are discussed from ardl (1,0,0,0,0) to (1,1,1,1,1). calculates of all these models show the different measures of sic (schwarz information criteria). the selected model for current study is initial one i.e. (1, 0, 0, 0, 0) that presents minimum value of sic, higher r squared value and also minimum residual sum of square (rss) which states that estimates of initial model is appropriate and well presentable as compared to all others. for detail description table of particular estimations are also presented in appendix 1.



Source: Authors Citation Using E-views 9 Statistical Package

Figure 0. Selection of Appropriate Model

Descriptions of Long Run Estimates of Ardl Model for Current Study: Table 2 provides the initial finding of the impact of direct and indirect taxes on sustainable development of an economy. calculated outcomes of the bound test measure signifies that all variables of the study are co-integrated with each other because the value of the f-statistics for co-integration are greater than lower and upper

Table 2. Lag Selection Criteria for Problem under Assessment.

Lag	Log L	LR	FPE	AIC	SIC	HQ
0	-104.15	NA	0.0003	6.237	6.459	6.313
1	66.51	282.81*	8.69e-08*	-2.086	-0.753*	-1.626*
2	91.85	34.76	9.35e-08	-2.106	0.338	-1.262
3	119.75	30.29	1.02e-07	-2.271*	1.283	-1.0442

Above measures indicate lag order selected by the criterion

LR: Sequential modified LR test statistics (Each Test at 5% Level); FPE: Final Prediction Error; AIC: Akaike Information Criterion; SC: Schwarz Information Criteria; HQ: Hannan- Quinn Information Criterion

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Table 3. Predication of causality Through Granger Causality Method.

Null Hypothesis	Observations	F-statistics	Probability
CD does not Granger cause GDP _{gr}	32	1.957	0.158
GDP _{gr} does not Granger Cause CD		4.658	0.017
DT does not Granger cause GDP _{gr}	32	3.845	0.032
GDP _{gr} does not Granger Cause DT		1.189	0.317
ET does not Granger cause GDP _{gr}	32	2.563	0.093
GDP _{gr} does not Granger Cause ET		0.889	0.420
ST does not Granger cause GDP _{gr}	32	30.29	1.02e-07
GDP _{gr} does not Granger Cause ST		1.976	0.155

Source: authors citation using e-views 9 statistical package

bound at 10 and 5 percent level of significance that favor the alternative hypothesis of variables are co-integrated and reject the null hypothesis of variables are not co-integrated.

Similarly, Table 3 represents the long run estimates of the overall model. Initial measure of R^2 demonstrate the goodness of fit of the model that explores that about 60 percent variation in GDP growth rate is due to direct and indirect taxes while other 40 percent is due to other factors that are not included in the model and are the part of residual. Like R^2 description F-statistics of the model shows overall significance of the model that checks that all the explanatory variables collectively affecting the dependent variable or not. In a current study the value of F-statistics is 8.95 with probability 0.000 which denotes that all the explanatory variables have significant impact on dependent variable because null hypothesis of all explanatory variables have no impact on dependent variable is rejected at 1, 5 and 10 percent level of significance.

Second step of individual significance states that all explanatory variables separately have significant impact on GDP growth rate. First variable of custom duty have positive impact on GDP growth rate that states that 1 percent increase in custom duty increase the 3.70 percent GDP growth rate of the country that is significantly beneficial for an economy because custom duty protect the domestic industry and increase the demand of local prepared goods that ultimately reduce the imports, increase the value of local currency that affect positively the sustainable development of the economy. Second variable of direct tax also has positive impact on GDP growth rate that states that 1 percent increase in direct tax leads to 4.62 percent increase in GDP growth rate. In a developing economy of Pakistan direct taxes are progressive in nature which shows that higher income groups and bigger property holders pay more tax as compared to their counter parts which generate higher tax revenue for government that ultimately use for development purposes and creates employment opportunities which leads to increase the production and cause significant increase in GDP growth rate of the economy. Estimates of third variable excise duties shows negative impact on GDP growth rate and states that 1 percent increase in excise duties decline 9.70 percent GDP

growth rate of the country that is significant alarming. Excise duties are applied on local manufacture goods that negatively affect the production of these goods and compel producer to stop the production of those goods because due to high excise duties price of particular goods increase that ultimately leads to decline in demand and cause the reduction of producer profit. When producers stop the production of those goods that are affected with excise duty unemployment increases and on a broader way, it leads to decline in GDP growth rate that affect harshly the sustainable development of the economy that are under study. Finally the variable of sale tax also has negative impact on GDP growth rate and states that 1 percent increase in sale tax leads to 1.83 percent decline in GDP growth rate. Sales tax has harsh impact on sustainable development of the economy because rich and poor are paid equally such type of tax which worse off poor more as compared to rich people.

Description of the short run estimates of the ARDL model:

Like above discussion of long run results Table 4 presents short run estimates of the problem under assessment. Like long run the relationship among GDP growth rate, direct and indirect taxes also remain same in the short run. However in short run overall effect of the entire variables little bit decline on GDP growth rate as compared to long run. Initial variable of custom duty has significant positive impact on GDP growth rate which states that 1 percent increase in Custom duty leads to 3.58 percent increase in GDP growth rate. Similarly, an estimate of direct tax also has positive impact on GDP growth rate. It shows that 1 percent increase in direct tax leads to 4.48 percent increase in GDP growth rate which ultimately put positive impact on sustainable development in short run. Like long run excise duties also have negative impact on GDP growth in short run and it shows that 1 percent increase in excise duties leads to 9.42 percent decline in GDP growth rate which ultimately harshly effect the sustainable development of the economy. Final measure of sale tax shows a negative relationship between sale tax and GDP growth rate and states that 1 percent increase in sale tax leads to 1.78 percent decline in GDP growth rate in short run which ultimately effects the sustainable development of an economy (Kouam and Asongu (2022).



Final measure of error correction mechanism discussed the adjustment toward equilibrium after a shock. According to different theory, the results of ECM measure must be significant negative and less than 1. if preceding conditions hold it is beneficial for economy because it states that economy is recovering the shock. Unlike, if the value of ECM is significant positive and less than 1 it means the conditions are getting worsen and we are moving away from equilibrium. In a Current study, estimated outcomes show that 97 percent annually recovery of shock toward equilibrium which broadly states the economy of Pakistan moving quickly toward sustainable development.

Table 0. Short Run Estimates of the ARDL (1, 0, 0, 0, 0) Model.

Variables	Coefficient	Std. Error	t-Statistics	Prob.
D(CD)	3.588	1.123	3.194	0.0032
D(DT)	4.484	1.442	3.109	0.0040
D(ET)	-9.417	2.109	-4.465	0.0001
D(ST)	-1.780	0.913	-1.949	0.0604
ECM(-1)	-0.970	0.152	-6.364	0.0000

CD=Log of Custom Duty; DT=Log of Direct Tax; ET=Log of Excise Duty; ST=Log of Sale Tax

Source: Author's Citations Using E-Views 9

Concluding Remarks: At the end of every study there should be some concluding remarks. in this study we have seen different taxation policies of pakistan and their impact on growth. the results of the study show that all explanatory variables separately have significant impact on gdp growth rate. first variable of custom duty have positive impact on gdp growth rate that states that 1 percent increase in custom duty increase the 3.70 percent gdp growth rate of the country that is significantly beneficial for an economy because custom duty protect the domestic industry and increase the demand of local prepared goods that ultimately reduce the imports, increase the value of local currency that affect positively the sustainable development of the economy. second variable of direct tax also has positive impact on gdp growth rate that states that 1 percent increase in direct tax leads to 4.62 percent increase in gdp growth rate. in a developing economy of pakistan direct taxes are progressive in nature which shows that higher income groups and bigger property holders pay more tax as compared to their counter parts which generate higher tax revenue for government that ultimately use for development purposes and creates employment opportunities which leads to increase the production and cause significant increase in gdp growth rate of the economy. estimates of third variable excise duties shows negative impact on gdp growth rate and states that 1 percent increase in excise duties decline 9.70 percent gdp growth rate of the country that is significant alarming. excise duties are applied on local manufacture goods that negatively affect the production of these goods and compel producer to stop the production of those goods

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POLICY RECOMMENDATIONS

Based on our research findings highlighting the impact of taxation policies on economic growth and inequality in Pakistan, we propose the following policy recommendations aimed at fostering sustainable development and reducing income disparities:

Reform of Indirect Taxes: Recognizing the positive impact of indirect taxes, particularly custom duties, on GDP growth, the government should incentivize compliance with these taxes. Measures such as simplifying tax procedures, enhancing tax enforcement mechanisms, and providing incentives for timely tax payments can encourage individuals and businesses to fulfill their tax obligations. Moreover, public awareness campaigns can be launched to educate citizens about the importance of indirect taxes in supporting economic development.

Custom Duties Oversight: Given the positive influence of custom duties on GDP growth by discouraging imports and promoting domestic production, stringent oversight measures should be implemented to ensure compliance with customs regulations. Enhanced border controls, electronic monitoring systems, and collaboration with international agencies can help curb smuggling and illicit trade practices. Furthermore, periodic reviews of tariff structures can ensure that custom duties remain aligned with national economic objectives.

Reduction of Sales Tax Burden: Acknowledging the adverse impact of sales tax on GDP growth, especially its regressive nature that burdens the poor disproportionately, the government should consider reducing the sales tax rate. Lowering the tax burden on essential goods and services can alleviate financial strain on low-income households, stimulate consumer spending, and spur economic activity. Targeted exemptions or rebates for basic necessities can further alleviate the burden on vulnerable populations.

Excise Tax Reform: In light of the negative impact of excise taxes on GDP growth by discouraging investment and production, policymakers should undertake comprehensive reform of the excise tax system. This may include revising tax rates, streamlining tax administration processes, and providing incentives for investment in key sectors. Additionally, sector-specific tax incentives and exemptions



can encourage innovation and competitiveness while minimizing the adverse effects of excise taxes on economic growth.

Overall, these policy recommendations aim to address the existing inequalities in Pakistan's taxation system and promote a more equitable and conducive environment for economic growth and development. By implementing targeted reforms and initiatives, the government can harness the potential of taxation policies to foster inclusive growth, reduce poverty, and enhance the overall welfare of the population.

Conclusion: This study aimed to analyze the impact of taxation policies on sustainable economic development in Pakistan. Three main objectives were pursued: analyzing different tax policies, identifying the most effective policy, and assessing their overall impact on the economy. The research focused on direct and indirect taxes, including sales tax, custom duty, and excise duty, over the period from 1981 to 2017.

The analysis employed hypothesis testing, with the hypothesis stating that the series under study requires application of unit root test to make them stationary. It was found that direct and indirect taxes significantly influence GDP growth rate, explaining approximately 60% of its variation. The remaining 40% is attributed to factors not included in the model.

The findings indicate that tax policies play a crucial role in shaping sustainable economic development in Pakistan. Effective tax policies contribute to revenue generation for government expenditure, infrastructure development, and social welfare programs. Moreover, a well-designed taxation system can incentivize investment, promote economic growth, and reduce income inequality.

However, despite the significant impact of tax policies on GDP growth rate, it is important to recognize that sustainable economic development is influenced by various factors beyond taxation. Factors such as political stability, institutional quality, human capital development, and global economic conditions also play pivotal roles.

Therefore, while taxation policies are integral to economic development, they must be complemented by comprehensive policy measures addressing broader socio-economic challenges. Policymakers should focus on enhancing tax efficiency, equity, and transparency, while also fostering an enabling environment for investment, innovation, and entrepreneurship.

In conclusion, the study underscores the importance of taxation policies as a critical determinant of sustainable economic development in Pakistan. By adopting evidence-based tax policies, Pakistan can promote economic stability, social welfare, and inclusive growth, thereby advancing towards a more prosperous and sustainable future.

This study is done on taxation system and different tax policies and their working in Pakistan's economy. There are three main objectives of this study in which firstly we analyzed different taxes and their policies, secondly we examined which policy is best suited and thirdly either these policies are working for betterment of economy or not. Reviews of various different studies has been done in the research. The main variables of the study are direct and indirect taxes. Direct taxes are taken as whole and from in indirect taxes; sales tax, custom duty, and excise duty are included. The research gap of the study is from 1981-2017. In the following study GDP growth rate is taken as dependent variable as an indicator of sustainable development. Hypothesis testing has been done as a methodology. In hypothesis testing we assume two hypothesis $H_0: \Pi_t=1$ the series under study is necessarily need application of unit root test to make them stationary. Mean and Variance of discussed series is not constant over the period of time $H_1: \Pi_t<1$ the series under study does not require any unit root application to make them non-stationary. Mean and Variance of discussed series is constant over the period of time. At first unit root test is been applied to see the probability values and to remove the problem of auto correlation of the variables then ARDL is applied. In ARDL test log of each variable is taken to check long run relationship among variables. The initial measure of R^2 explains the goodness of fit of the model that explores that about 60% variation in GDP growth rate is due to direct direct and indirect taxes and 40% are due to other factors that are not included in the model and are the part of residual. All explanatory variables have significant impact on dependent variable because null hypothesis of all explanatory variables have no impact on dependent variable and is rejected at 1,5 and 10% level of significance.

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